

Please type a plus sign (+) inside this box

→ +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Substitute for form 1449A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(use as many sheets as necessary)**

Sheet 1 of 5

| <b>C mplete if Known</b> |                       |
|--------------------------|-----------------------|
| Application Number       | Unknown               |
| Filing Date              | Concurrently herewith |
| First Named Inventor     | YADAV                 |
| Group Art Unit           | unknown               |
| Examiner Name            | Unknown               |
| Attorney Docket Number   | CL1127 US DIV         |

## **U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document |                     | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sub>6</sub> |
|--------------------|-----------------------|-------------------------|---------------------|---|--|---|----------------|
|                    |                       | Office <sup>3</sup>     | Number <sup>4</sup> |   |  |   |                |
| T.Z.               |                       | WO                      | 97/06269            | A1  | ZENECA   | 02/20/1997  |                |
|                    |                       | WO                      | 97/11189            | A2  | ZENECA   | 03/27/1997  |                |
|                    |                       | WO                      | 91/09957            | A1  | DUPONT   | 07/11/1991  |                |
|                    |                       | WO                      | 97/37012            | A1  | COMMONWEALTH SCIENTIFIC AND IND. RESCH.          | 10/09/1997  |                |
|                    |                       | WO                      | 95/34668            | A2  | BIOSOURCE  | 12/21/1995  |                |
|                    |                       | EP                      | 221044              | A1  | MONSANTO   | 05/06/1987  |                |
|                    |                       | WO                      | 98/36083            | A1  | PLANT BIO.SCI.                                   | 08/20/1998  |                |
|                    |                       | WO                      | 94/19477            | A1  | CALGENE  | 09/01/1994  |                |
|                    |                       | EP                      | 0425044             | A2  | CLOVIS   | 05/02/1991  |                |
|                    |                       | WO                      | 00/60091            | A2  | OKLAHOMA MED.RESC                                | 10/12/2000  |                |
| V                  |                       | WO                      | 93/01283            | A1  | USA AGRICULTURE                                  | 01/21/1993  |                |
|                    |                       | WO                      | 98/38323            | A2  | BIOCHEM  | 09/03/1998  |                |

|                       |            |                    |            |
|-----------------------|------------|--------------------|------------|
| Examiner<br>Signature | /Li Zheng/ | Date<br>Considered | 08/17/2006 |
|-----------------------|------------|--------------------|------------|

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments or the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2

of

5

### Complete if Known

|                      |                       |
|----------------------|-----------------------|
| Application Number   | Unknown               |
| Filing Date          | Concurrently herewith |
| First Named Inventor | YADAV                 |
| Group Art Unit       | unknown               |
| Examiner Name        | Unknown               |

Attorney Docket Number

CL1127 US DIV

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|---------------------|-----------------------|---|----------------|
| LZ                  |                       | Covey, S. N. et. al., Plants combat infection by gene silencing, 1997 Nature (London) Vol. 385: pages 781-782   |                |
|                     |                       | Kumagai et al., Cytoplasmic Inhibition of carotenoid biosynthesis with virus-derived RNA, 1995, Proc. Natl. Acad. Sci. (U.S.A.) Vol. 92: pages 1679-1683  |                |
|                     |                       | Ratcliff, F. et al., A similarity Between Viral Defense and Gene Silencing in Plants, 1997, Science (Washington, D.C.) Vol. 276: pages 1558-1560  |                |
|                     |                       | DeVeylder, L. et al., Herbicide Safener-Inducible Gene Expression in Arabidopsis thaliana, Plant Cell Physiol., Vol. 38, Pages 568-577, 1997  |                |
|                     |                       | Gatz, C., Chemical Control of Gene Expression, Annu. Rev. Plant Physiol. Plant Mol. Biol., Vol. 48: pages 89-108, 1997  |                |
|                     |                       | Hansen, G. et al., Wound-Inducible and organ-specific expression of ORF13 from Agrobacterium rhizogenes 8196-T-DNA in transgenic tobacco plants, Mol. Gen. Genet. Vol. 254: pages 337-343, 1997   |                |
|                     |                       | Odell, J. et al., Seed-Specific Gene Activation Mediated by the Cre/lox Site-Specific Recombination System, Plant Physiol. 91994, Vol. 106: 447-458   |                |
|                     |                       | vander Geest et al., Cell Ablation Reveals that Expression from the Phaseolin Promoter Is Confined to Embryogenesis and Microsporogenesis, Plant Physiol., 1995, 109(4), pages 1151-1158  |                |
|                     |                       | Ma et al., Seed-specific expression of the isopentenyl transferases gene (ipt) in transgenic tobacco, Aust. J. Plant Physiol., 1998, 25(1), pages 53-59   |                |
|                     |                       | Czako et al., Differential manifestation of seed mortality induced by seed-specific expression of the gene for diphtheria toxin A chain in Arabidopsis in tobacco, Mol. Gen. Genet., 1992, Vol. 235(1), pages 33-40   |                |
|                     |                       | Albert et al., Site-specific integration of DNA into wild-type and mutant lox sites placed in the plant genome, Plant J. Vol. 7: pages 649-659, 1995  |                |
|                     |                       | Araki et al., Targeted integration of DNA using mutant lox sites in embryonic stem cells, Nucleic Acids Res. Vol. 25: 868-872, 1997   |                |
|                     |                       | McGonigle, Brian et al., Nuclear localization of the Arabidopsis APETALA3 and PISTILLATA homeotic gene product depends on their simultaneous expression, Genes and Development, Vol. 10, No. 14, 1996, pages 1812-1821, XP000998028                             |                |
| ↓                   |                       | Theerakulpisut, P. et al., Isolation and Development Expression of BCP1 an Anther-Specific cDNA Clone in Brassica-Campestris, Plant Cell, Vol. 3, No. 10, 1991, pages 1073-1084, XP000986143  |                |

Examiner Signature

/Li Zheng/

Date Considered

08/17/2006

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

3

of

5

*Complete If Known*

|                        |                       |
|------------------------|-----------------------|
| Application Number     | Unknown               |
| Filing Date            | Concurrently herewith |
| First Named Inventor   | YADAV                 |
| Group Art Unit         | unknown               |
| Examiner Name          | Unknown               |
| Attorney Docket Number | CL1127 US DIV         |

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (In CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|---------------------|-----------------------|---|----------------|
| I.Z                 |                       | Sablowski et al., Expression of a flower-specific Myb protein in leaf cells using a viral vector causes ectopic activation of a target promoter, <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 92, pages 6901-6905, 1995   |                |
|                     |                       | Hayes et al., Stability and expression of bacterial genes in replicating geminivirus vectors in plants, <i>Nucleic Acids Res.</i> , Vol. 17, pages 2391-2403, 1989  |                |
|                     |                       | Hayes et al., Gene amplification and expression in plants by a replicating geminivirus vector, <i>Nature (London)</i> , Vol. 334, pages 179-182, 1988   |                |
|                     |                       | Hong et al., Resistance to geminivirus infection by virus-induced expression of dianthin in transgenic plants., <i>Virology</i> , 1996 Jun 1, Vol. 220, pages 119-127   |                |
|                     |                       | Hong et al., "Transactivation of dianthin transgene expression by African cassava mosaic virus AC2.", <i>Virology</i> , (1997 February 17, Vol. 228, pages 383-387)   |                |
|                     |                       | Rogers et al., Tomato Golden Mosaic Virus a Component DNA Replicates Autonomously in Transgenic Plants, <i>Cell</i> , Vol. 45, pages 593-600, 1986  |                |
|                     |                       | Goodman et al., Geminiviruses, <i>J. Gen. Virol.</i> , Vol. 54, pages 9-21, 1981  |                |
|                     |                       | Hanley-Bowdoin et al., Functional Expression of the Leftward Open Reading Frames of the A component of Tomato Gleden Mosaic Virus in Transgenic Tobacco Plants, <i>Plant Cell</i> , Vol. 1, pages 1057-1067, 1989   |                |
|                     |                       | Hanley-Bowdoin et al., Expression of functional replication protein from tomato golden mosaic virus in transgenic tobacco plants, <i>Proc. Natl. Acad. Sci. U.S.A.</i> , Vol. 87, pages 1446-1450, 1990   |                |
|                     |                       | Hayes et al., Replication of tomato golden mosaic virus DNA B in transgenic plants expressing open reading frames (ORFs) of DNA A: , <i>Nucleic Acids Research</i> , GB, Oxford University Press, Surrey, Vol. 17, No. 24, 10213-10222, December 25, 1989       |                |
|                     |                       | Al-Kaff et al., Transcriptional and Posttranscriptional plant Gene Silencing in Response to a Pathogen, <i>Science (Washington, DC)</i> , Vol. 279, pages 2113-2115, 1998   |                |
|                     |                       | Needham et al., GUS expression patterns from a tobacco yello dwarf virus-based episomal vector, <i>Plant Cell Rep.</i> , Vol. 17, pages 631-639, 1998   |                |
|                     |                       | Senior et al., Uses of Plant Gene Silencing, <i>Biotechnol. Genet. Eng. Rev.</i> , Vol. 15, pages 79-119, 1998  |                |
|                     |                       | Thomas et al., Mechanisms and applications of Gene Silencing, <i>Plant Growth Regul.</i> , Vol. 25, page 205, 1998  |                |
|                     |                       | Ruiz et al., Initiation and Maintenance of Virus-Induced Gene Silencing, <i>Plant Cell</i> , Vol. 10, pages 937-946, 1998   |                |
|                     |                       | Kjemtrup et al., Gene Silencing from plant DNA Carried by a Geminivirus, <i>Plant J.</i> , Vol. 14, pages 91-100, 1998  |                |
|                     |                       | Atkinson et al., Post-transcriptional silencing of chalcone synthase in petunia using a geminivirus-based episomal vector, <i>Plant J.</i> , Vol. 15, pages 593-604,  |                |
|                     |                       | Ow, The Right Chemistry for Marker Gene Removal, <i>Nature Biotechnology</i> , Vol. 19, February 2001 pages 115-116   |                |
|                     |                       | Russell et al., Directed excision of a transgene from the plant genome, <i>Mol. Gen. Genet.</i> Vol. 234: pages 49-59, 1992   |                |
|                     |                       | J. L. Craig, The Mechanism of Conservative Site-Specific Recombination, <i>Annu. Rev. Genet.</i> , Vol. 22: pages 77-105, 1988  |                |

Examiner Signature

/Li Zheng/

Date Considered

08/17/2006

Please type a plus sign (+) inside this box

→ +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Approved for use through 10/31/2002. OMB 0851-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

|  |   |    |   |                          |                       |
|--|---|----|---|--------------------------|-----------------------|
| Substitute for form 1449A/PTO  |   |    |   | <i>Complete If Known</i> |                       |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><i>(use as many sheets as necessary)</i> |   |    |   | Application Number       | Unknown               |
|  |   |    |   | Filing Date              | Concurrently herewith |
|  |   |    |   | First Named Inventor     | YADAV                 |
|  |   |    |   | Group Art Unit           | unknown               |
|  |   |    |   | Examiner Name            | Unknown               |
| Sheet  | 4 | of | 5 | Attorney Docket Number   | CL1127 US DIV         |

U.S. PATENT DOCUMENTS

## **FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document |                     |                                   | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sub>6</sub> |
|--------------------|-----------------------|-------------------------|---------------------|-----------------------------------|---|--|---|----------------|
|                    |                       | Office <sup>3</sup>     | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |   |  |   |                |
| LZ                 |                       | WO                      | 98/38323            | A2                                | BIOCEM  | 09/03/1998                                       |   |                |
|                    |                       | WO                      | 91/09957            | A1                                | DUPONT  | 07/11/1991                                       |   |                |
|                    |                       | WO                      | 94/03619            | A2                                | ZENECA  | 02/17/1994                                       |   |                |
|                    |                       | WO                      | 00/17365            | A2                                | DUPONT  | 03/30/2000                                       |   |                |
|                    |                       | WO                      | 99/25854            | A1                                | PIONEER   | 05/27/1999                                       |   |                |
|                    |                       | WO                      | 99/25841            | A1                                | PIONEER   | 05/27/1999                                       |   |                |
|                    |                       | WO                      | 99/25840            | A1                                | PIONEER   | 05/27/1999                                       |   |                |
|                    |                       | WO                      | 99/11807            | A1                                | PURDUE  | 03/11/1999                                       |   |                |
|                    |                       | WO                      | 98/28431            | A1                                | Centre Innov. LTD                               | 07/02/98   |   |                |
|                    |                       | WO                      | 95/25801            | A2                                | Univ. Leicester                                 | 09/28/95   |   |                |
| V                  |                       | WO                      | 99/25855            | A1                                | Baszczynski et al.                              | 05/27/99   |   |                |
|                    |                       | WO                      | 96/04393            | A2                                | Delta & Pineland Co.                            | 02/15/96   |   |                |

|                    |            |                 |            |
|--------------------|------------|-----------------|------------|
| Examiner Signature | /Li Zheng/ | Date Considered | 08/17/2006 |
|--------------------|------------|-----------------|------------|

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) inside this box

→

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Approved for use through 10/07/2002; GPO 2001-0931  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |   |    |   |                          |                       |
|--|---|----|---|--------------------------|-----------------------|
| Substitute for form 1449A/PTO                            |   |    |   | <b>Complete If Known</b> |                       |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   |    |   | Application Number       | Unknown               |
| (use as many sheets as necessary)                        |   |    |   | Filing Date              | Concurrently herewith |
|  |   |    |   | First Named Inventor     | YADAV                 |
|  |   |    |   | Group Art Unit           | unknown               |
|  |   |    |   | Examiner Name            | Unknown               |
| Sheet  | 5 | of | 5 | Attorney Docket Number   | CL1127 US DIV         |

#### **OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|---------------------|-----------------------|---|----------------|
| LZ                  |                       | Lyznik et al., FLP-mediated recombination of FRT sites in the maize genome Nucleic Acids Research, 1996, Vol., 24, No.19, pp. 3784-3789   |                |
|                     |                       | Kilby et al., FLP recombinase in transgenic plants: Constitutive activity in stably transformed tobacco and generation of marked cells clones in Arabidopsis, Plant Journal, 1995, Vol. 8, No. 5, pp. 637-652   |                |
|                     |                       | Odell et al., Site-directed Recombination in the Genome of Transgenic Tobacco, Mol. Gen. Genet, 1990 223 (3), 369-378   |                |
|                     |                       | Onouchi et al., Operation of an efficient site-specific recombination system in Zygosporeomyces rouxii in tobacco cells, Nucleic Acids Res., 1991, 19, 23, 6373-6378  |                |
|                     |                       | Odell et al., Use of site-specific recombination systems in plants. Homologous Recomb. Gene Silencing Plants (1994), 219-70, Editors: Paszkowski, Jerzy, Publisher: Kluwer, Dordrecht, Germany  |                |
|                     |                       | Zubko et al., Intrachromosomal recombination between attP regions as a tool to remove selectable marker genes from tobacco transgenes, (2000) Nature Biotechnology 18:442   |                |
|                     |                       | Groth et al., A phage integrase directs efficient site-specific integration in human cells, (2000) Proc. Natl Acad. Sci. USA 97:5995  |                |
|                     |                       | H Matsuzaki et al., Chromosome Engineering in Saccharomyces cerevisiae by Using a Site-Specific Recombination System of a Yeast Plasmid, J. of Bacteriology, vol. 172, p.610, 1990  |                |
|                     |                       | Angell et al., Consistant Gene silencing in transgenic plants expressing a replication potato virus X RNA, EMBO Journal, 3675-84, XP002135935, June 1997  |                |
|                     |                       | Pruss et al., Plant viral synergism: The polyviral genome encodes a broad-range pathogenicity enhance that transactivates replication of heterologous viruses*. Plant Cell, Vol. 9, 1997, pp. 859-868, XP002078748  |                |
| ↓                   |                       | Mariani et al., Induction of Male Sterility in Plants by a Chimaeric Ribonuclease Gene, Nature GB MacMillan Journals LTD, London, Vol. 347, 25 October 1990, pp. 737-741  |                |

|                    |            |                 |            |
|--------------------|------------|-----------------|------------|
| Examiner Signature | /Li Zheng/ | Date Considered | 08/17/2006 |
|--------------------|------------|-----------------|------------|

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.